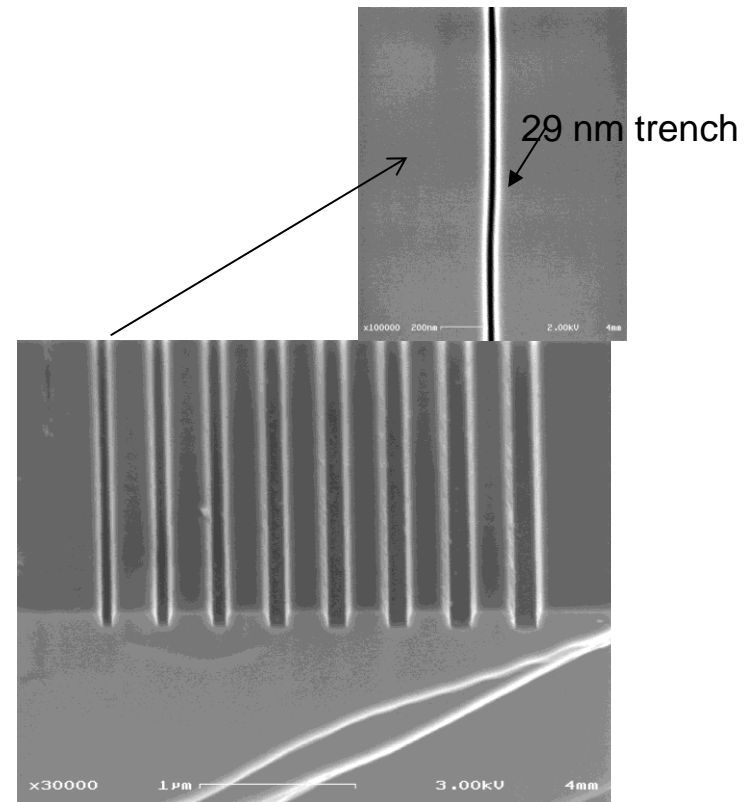


GaAs Nanotrenches

Substrate: GaAs Nanotrenches
Chemistry: BCl₃, Ar, N₂
Mask: PMMA
Selectivity: 1.22
Etch rate: 0.5 um/min

BCl₃ flow: 20 sccm
Ar flow: 10 sccm
N₂: 5 sccm
Pressure: 2 mTorr
ICP Power: 500 W
RF Bias: 100 W
Temperature: 20 °C



This process was used to etch nano-trenches and -holes and resulted in clean & smooth etch surface, good selectivity to PMMA, and 85 degree side wall.